

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

The claims currently pending in this application are Claims 1-8, 10-15 and 17, with Claims 1 and 10 being the only independent claims.

The most recent Official Action maintains the rejection of independent Claims 1 and 10, and various dependent claims, on the basis of the disclosure contained in U.S. Patent No. 6,285,910 to *Verness et al.* It is understood from the Official Action that the coil conductor 116 and the stranded conductor 118 disclosed in *Verness et al.* are interpreted to correspond to the helical parallel coil of plural conductor wires having different properties and insulated from each other as recited in the independent claims. It is noted, however, that *Verness et al.* describes near the bottom of column 3 that the stranded conductor 118 possesses a generally straight configuration. Thus, *Verness et al.* does not actually disclose a helical parallel coil of plural conductor wires. Nevertheless, to better define the previously recited helical parallel coils of plural conductive wires, Claims 1 and 10 have been amended to recite that the helical parallel coil is constituted by the plurality of conductive wires being rolled in parallel with the same diameter so that the plurality of conductive wires are next to each other. This arrangement is clearly illustrated in Figs. 4A, 4B, 9A, 9B.

This configuration of the plural conductive wires forming the helical parallel coil advantageously makes it possible to maintain the diameter of the lead body relatively small while at the same time maintaining sufficient space of the lumen in the lead body. In addition, the helical parallel coil arrangement reduces the internal

stress acting on the respective conductor wires and also helps maintain an electrical connection between the electrode at the distal end and the connecting terminal at the proximal end with little change in contact resistance, even when one of the plurality of conductive wires is damaged. Further, in connection with the implantable medical instrument recited in Claim 10, it is possible to detect and inform about the damage when one of the plural conductive wires is damaged. Thus, the implantable electrode lead provided here can be used more safely.

In connection with the various embodiments of the medical electrical lead disclosed in *Verness et al.*, the disclosed stranded conductor 118 is generally straight and extends either outside the lumen of the coil conductor 116 or within the lumen of the coil conductor 116. Thus, *Verness et al.* does not disclose utilizing a helical parallel coil of plural conductive wires in which the plurality of conductive wires are rolled in parallel at the same diameter so that the plurality of conductive wires are next to each other as recited in independent Claims 1 and 10.

The Official Action seems to suggest that the helical parallel coil of plural conductive wires recited in independent Claims 1 and 10 constitutes a matter of obvious design choice relative to the arrangement disclosed in *Verness et al.* This position is respectfully traversed for several reasons. First, there is simply no basis to support the position that differences between the arrangement disclosed in *Verness et al.* and the claimed subject matter constitute matters of obvious design choice. This is particularly so where, as here, the claimed arrangement is intended to provide advantages and/or results relevant to the use and/or operation of the claimed subject matter. It is also respectfully pointed out that nothing in the evidence of record establishes that one considering the disclosure in *Verness et al.* would

have been motivated, based on obvious design choice, to modify the disclosed arrangement of the coil conductor 116 and the stranded conductor 118 to result in the claimed helical parallel coil arrangement defined in independent Claims 1 and 10. In fact, the disclosure in *Verness et al.* at various places describing the construction and intended effects associated with the various embodiments evidences a purpose for the disclosed arrangement of the coil conductor 116 and the stranded conductor 118. For example, the discussion in column 1, lines 31-56 of *Verness et al.* describes that the stranded conductor 118 limits the extensibility of the coil conductor 116 so that the coil conductor is less susceptible to axially applied tensile forces. These and other portions of the disclosure in *Verness et al.* would have led one to understand that a reason exists for the arrangement of the coil conductor 116 and the stranded conductor 118 described in *Verness et al.*, thus directing one away from modifying the disclosed arrangement as a matter of “obvious design choice.” Thus, no basis exist for concluding that it would have been obvious as a matter of design choice to arrange the coil conductor and the stranded conductor disclosed in *Verness et al.* in the manner recited in the independent claims here.

For at least the reasons set forth above, it is respectfully submitted that independent Claims 1 and 10 are patentably distinguishable over the disclosure contained in *Verness et al.* The dependent claims are also allowable at least by virtue of their dependence from allowable independent claims.

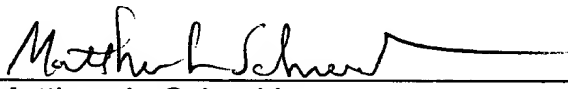
Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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